GENERAL

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR REQUIREMENTS OF BOISE CITY PUBLIC WORKS DEPARTMENT. THE ADA COUNTY HIGHWAY DISTRICT, AND/OR THE ISPWC (CURRENT EDITION)

2. A PRE CONSTRUCTION CONFERENCE WILL BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR

UTILITY CONTRACTORS SHOULD BE PRESENT. 3. ALL LOT, BLOCK, STREET RIGHT-OF-WAY, AND EASEMENT DIMENSIONS SHALL BE TAKEN FROM THE FINAL PLAT OF ASHEVILLE SUBDIVISION

4. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND SUCH MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATION OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE. 5. SURVEY CONTROL POINTS WHICH ARE CRITICAL TO THE CONSTRUCTION OF THE PROJECT ARE LOCATED WITHIN THE LIMITS OF WORK. THE CONTRACTOR SHALL

TAKE PRECAUTION TO PROTECT THE POINTS IN PLACE. 6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE

7. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE

CONSTRUCTION AREA. 8. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.

9. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE.

10. CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF ITEM #9 AT THE REQUEST OF THE AGENCY AND OR THE ENGINEER. 11. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT-OF-WAY PERMIT FROM ACHD AT LEAST 24

HOURS PRIOR TO ANY CONSTRUCTION.

12. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER. 13. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK

WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION. 14. THE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS AND SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.

15. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY CONFLICTS NOT SHOWN ON PLANS. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL DIG-LINE 1-800-342-1585.

16. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY NECESSARY NPDES PERMITS, FILING ANY NOI'S, AND PREPARING A POLLUTION PREVENTION PLAN (PPP) IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY. CONTACT THE EPA AT (208)378-5746 FOR THE REQUIRED INFORMATION. A SHORT TERM ACTIVITY EXEMPTION FOR DEWATERING SHALL BE OBTAINED IN ACCORDANCE WITH DEQ REQUIREMENTS. CONTACT DEQ AT (208) 373-0557. SAID PERMIT SHALL BE PRESENTED TO THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.

17. ALL UTILITIES INCLUDING SERVICE LINES WITHIN THE STREET TRAVEL WAYS SHALL BE IN PLACE PRIOR TO CURB, GUTTER, SIDEWALKS AND STREET

18. THE PIPE CONTRACTOR SHALL REPLACE ALL PAVEMENT AND CONCRETE REMOVED FOR THE INSTALLATION OF WATER, SEWER, OR IRRIGATION PIPE. ALL PAVEMENT SHALL BE REPLACED WITHIN SEVEN CALENDAR DAYS FROM THE TIME THE PAVEMENT AND/OR CONCRETE IS REMOVED. CONCRETE AND PAVEMENT SHALL BE REPLACED PER ISPWC STANDARDS.

19. NO PAVING SHALL OCCUR UNTIL THE CONTRACTOR OBTAINS WRITTEN APPROVAL OF ALL INSTALLED WATER AND SEWER FACILITIES FROM THE CITY OF BOISE, UNITED WATER IDAHO AND THE DEVELOPERS ENGINEER.

ROADWAY

1. ALL CONSTRUCTION IN THE PUBLIC RIGHT—OF—WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPWC AND THE ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS, AND THE ISPWC WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.

2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.

3. INSPECTION OF WORK WITHIN THE RIGHT-OF-WAYS SHALL BE BY THE ADA COUNTY HIGHWAY DISTRICT AND THE OWNER'S ENGINEER.

4. ALL TOPS OF VALVE BOXES AND SEWER MANHOLES SHALL BE SET FLUSH WITH THE SLOPE OF THE FINISHED STREET GRADES. THE ROADWAY CONTRACTOR SHALL INSTALL AND ADJUST ALL SPACERS, GRADE RINGS, MANHOLE RINGS AND LIDS.

5. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.

6. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER.

7. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.

8. ALL STORM DRAINAGE APPURTENANCES SHALL BE INSPECTED AND CERTIFIED BY ADA COUNTY HIGHWAY DISTRICT.

9. ALL WATER VALVES WILL BE PLACED SO AS NOT TO CONFLICT WITH ANY CONCRETE CURB, GUTTER, VALLEY GUTTER, AND SIDEWALK IMPROVEMENTS. 10. ALL WATER METERS ARE TO BE LOCATED OUTSIDE THE ROAD RIGHT-OF-WAY. ALL FIRE HYDRANTS ARE TO BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY. THERE MUST BE AT LEAST A ONE (1) FOOT SEPARATION BETWEEN BACK OF SIDEWALK (OR CURB IF NO SIDEWALK) AND THE LEADING EDGE OF ANY FIRE

11. OVER EXCAVATION AND ADDITIONAL GRANULAR BACKFILL MAY BE REQUIRED IN HIGH GROUNDWATER AREAS WHICH ARE TO BE DETERMINED BY THE FIELD

12. ALL MATERIAL PLACED AS FILL OR BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 306 OF THE CURRENT EDITION OF ADA COUNTY HIGHWAY DISTRICT STANDARD SPECIFICATIONS.

13. ROADWAY CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION STANDARD DRAWINGS: (CURRENT EDITION)

1. STREET SECTION, DRAWING NO. SD-801, AND SECTIONS AS SHOWN ON ROADWAY DETAIL SHEET.

2. 4.0' CONCRETE VALLEY GUTTER, DRAWING NO. SD-708. 3. ROLLED CURB AND GUTTER, DRAWING NO. SD-702.

4. PEDESTRIAN RAMP FOR HANDICAPPED, DRAWING NO. SD-712C.

5. SIDEWALKS, DRAWING NO. SD-709.

6. STANDARD DROP INLET TYPE I W/ 12" SUMP. DRAWING NO. SD-601. 7. STANDARD DROP INLET TYPE VI W/ 12" SUMP. DRAWING NO. SD-605A.

PERVIOUS CONCRETE

WORK ON ASHEVILLE SUBDIVSION PERVIOUS CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 522.1, 'SPECIFICATION FOR PERVIOUS CONCRETE PAVEMENT,' PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS MICHIGAN, EXCEPT AS MODIFIED BY THESE CONTRACT DOCUMENTS.

2. CONTRACTOR SHALL SUBMIT DRAWINGS AND DOCUMENTATION AS REQUIRED BY ACI 522.1 FOR ACCEPTANCE BY THE ENGINEER TO INCLUDE: - PERVIOUS CONCRETE MIXTURE PROPORTIONS AND DENSITY

QUALIFICATIONS AND EXPERIENCE OF CONTRACTOR IN PLACING PERVIOUS CONCRETE.

- IN-PLACE PAVEMENT RESULTS FROM PREVIOUS WORK, PREFERABLY WITHIN THE PREVIOUS 12 MONTHS.

- IF PREVIOUS WORK EXAMPLES ARE NOT ACCEPTABLE TO ENGINEER, CONTRACTOR SHALL PROVIDE TEST PANELS AND EVALUATION RESULTS AS REQUIRED BY ACI 522.1. - TRANSPORTATION, PLACEMENT AND FINISHING PLAN, INCLUDING PERSONNEL AND EQUIPMENT REQUIRED.

3. TWO CORES SHALL BE REMOVED FROM EACH DRAINAGE AREA PANEL DEFINED ON THE MAP. THE RESULTS OF THE TESTS DESCRIBED IN ACI 522.1 SHALL BE REPORTED TO THE OWNER AND ENGINEER PRIOR TO FINAL ACCEPTANCE.

4. CONTRACTION JOINTING PER ACI 522.1 SHALL BE PERPENDICULAR TO PANELS AT 20' MAXIMUM AND 10' MINIMUM INTERVALS ALONG EACH DRAINAGE AREA PANEL.

5. SEE DETAILS SHEET 5 FOR ADDITIONAL INFORMATION.

6. INSPECTIONS AND FINAL ACCEPTANCE OF PERVIOUS CONCRETE CONSTRUCTION SHALL BE BY BAILEY ENGINEERING, INC.

IRRIGATION

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2010 EDITION OF IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (I.S.P.W.C.) AND NAMPA MERIDIAN IRRIGATION DISTRICT STANDARD SPECIFICATIONS FOR IRRIGATION WATER DISTRIBUTION SYSTEMS.

2. TEN (10) FEET OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND NON-POTABLE WATER LINES.WHERE IT IS NECESSARY FOR THE NON POTABLE WATER LINE AND WATER LINE TO CROSS EACH OTHER AND THE NON POTABLE LINE IS LESS THAN 18" BELOW OR ABOVE THE WATER MAIN, THE NON POTABLE WATER LINE CROSSING SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C-900 (CLASS 160) OR ASTM D2241 (CLASS 250) STANDARDS WITH WATERTIGHT JOINTS, OR EQUAL CONSTRUCTION, FOR A DISTANCE OF 10' ON BOTH SIDES OF THE WATER LINE IN ACCORDANCE WITH IDAPA 58.01.08, RULES FOR PUBLIC DRINKING WATER SYSTEMS. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER OR NON POTABLE WATER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. IN LIEU OF CONSTRUCTING OR RECONSTRUCTING THE SEWER OR NON POTABLE WATER LINE TO CONFORM TO WATER MAIN STANDARDS, THE NON POTABLE WATER LINE MAY BE SLEEVED PER IDAPA 58.01.08, SECTION 550.06.h.v. CONSTRUCTION SHALL BE IN CONFORMANCE WITH ISPWC SD-407, NON-POTABLE WATER LINE SEPARATION.

3. MINIMUM BURIAL DEPTH FOR ALL IRRIGATION MAINS SHALL BE 2.5 FEET FROM FINISHED GRADE TO TOP OF PIPE. ALL CROSSING OF PUBLIC RIGHT-OF-WAY WITH PRESSURE IRRIGATION SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3.5 FEET. PIPE SHALL BE CONSTRUCTED TO SLOPE TO DRAINS AND/OR PUMP-OUT STATIONS AS SHOWN ON THE PLANS

4. ALL VAULTS AND VALVE BOX COVERS FOR THE PRESSURIZED IRRIGATION SYSTEM SHOULD BE IDENTIFIED AS "IRRIGATION" OR "NONPOTABLE WATER."

5. PRESSURE IRRIGATION MAINS WITHIN THE RIGHT OF WAY SHALL BE BEDDED WITH REJECT SAND MEETING GRADATION SPECIFICATIONS OF TABLE 801 OF I.S.P.W.C.

6. FINAL APPROVAL AND ACCEPTANCE OF ALL PRESSURE IRRIGATION CONSTRUCTION WILL BE BY THE OWNER'S ENGINEER AND BOISE CITY.

7, FINAL APPROVAL OF GRAVITY IRRIGATION CONSTRUCTION WILL BE BY THE NAMPA MERIDIAN IRRIGATION DISTRICT.

8. PRESSURE IRRIGATION INSPECTIONS WILL BE BY THE OWNERS ENGINEER AND THEIR DECISIONS SHOULD BE CONSIDERED AS FINAL. SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER, CONTRACTOR TO NOTIFY ENGINEER OF TESTING 24 HOURS PRIOR.

9. ALL TEES, PLUGS, CAPS, AND BENDS OF 11-1/4° AND GREATER AT LOCATIONS WHERE UNBALANCED FORCES EXIST SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN IN THE ISPWC STANDARDS.

10. ALL PLASTIC PIPE SHALL BE INSTALLED WITH LOCATING WIRE AND IDENTIFICATION TAPE AS SPECIFIED IN ISPWC SECTION 901.

11. PRESSURE MAIN LINE PIPING SHALL BE PVC, 200 PSI, SDR 32.5 CONFORMING TO ASTM D-2241.

12. GRAVITY FLOW IRRIGATION PIPE SHALL BE 18"RCP.

13. THE CONTRACTOR SHALL CONTACT BAILEY ENGINEERING, INC. TO WITNESS THE PRESSURE TEST.

BOISE CITY SEWER

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST SEWER SPECIFICATIONS AND STANDARD DRAWINGS OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC), BOISE CITY PUBLIC WORKS DEPARTMENT AND/OR THE ADA COUNTY HIGHWAY DISTRICT (ACHD) MODIFICATIONS TO THE ISPWC.

2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. 3. SEWER PIPE WITH COVER OF GREATER THAN 3 FEET, SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034 FOR 4-INCH THROUGH 15-INCH AND ASTM F679 FOR 18-INCH THROUGH 27-INCH AS SET FORTH BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. SEWER PIPE WITH LESS THAN 3 FEET OF COVER SHALL BE DUCTILE IRON CONFORMING TO ANSI A-21.51 OR AWWA C-151 MINIMUM CLASS 50. A RUBBER RING IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH THE MANHOLE BASE AND/OR ITS CHANNEL IN ORDER TO ENSURE A WATER-TIGHT SEAL. 4. SEWER INSPECTIONS WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT AND THEIR DECISIONS SHOULD BE CONSIDERED AS

PROVIDE PERIODIC INSPECTIONS FOR AN EIGHT-HOUR DAY, FROM 8:00 A.M. TO 5:00 P.M., FOR A FORTY HOUR WEEK. THE CONTRACTOR SHALL REIMBURSE THE CITY AT RATES ESTABLISHED BY THE CITY FOR INSPECTION IN EXCESS OF THE NORMAL WORK WEEK, INCLUDING LEGAL HOLIDAYS, OVERTIME INSPECTION RATES AND A LIST OF LEGAL HOLIDAYS CAN BE OBTAINED FROM THE BOISE CITY PUBLIC WORKS DEPARTMENT. 5. SERVICE LINES SHALL BE MARKED IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWING SD 512. SERVICE LINE MARKERS SHALL REMAIN IN PLACE DURING CONSTRUCTION AND BE PRESENT FOR FINAL INSPECTION. 5. PRIOR TO FINAL ACCEPTANCE, AFTER ALL UTILITIES ARE IN AND PRIOR TO PAVING, AN AIR TEST SHALL BE CONDUCTED. THE

CONTRACTOR SHALL CONTACT THE CITY OF BOISE A MINIMUM OF 24 HOURS PRIOR TO TESTING. ALL MANHOLES SHALL BE TESTED IN ---------------

FINAL. THE CONTRACTOR WILL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO CONSTRUCTION. BOISE CITY WILL

". THE SEWER CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE SEWER CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE MANHOLE CONE TO ASSURE THAT RING ELEVATIONS MATCH FINAL STREET GRADES. THE MAXIMUM HEIGHT OF THE GRADE RINGS SHALL BE SUCH THAT THE FINISH GRADE ELEVATION OF THE MANHOLE FRAME AND COVER SHALL NOT BE MORE THAN TWENTY-ONE (21") INCHES ABOVE THE TOP OF THE MANHOLE CONE. 3. THE PAVING CONTRACTOR SHALL SET THE GRADE RINGS AND POUR THE CONCRETE COLLARS PER STANDARD DRAWING NO. SD 508. THE PAVING CONTRACTOR SHALL CONTACT ACHD 24 HOURS PRIOR TO POURING CONCRETE COLLARS. 9. THE HORIZONTAL SEPARATION OF THE WATER AND SEWER MAINS SHALL BE A MINIMUM OF TEN (10) FEET. WHERE IT IS NECESSARY FOR SEWER AND WATER TO CROSS EACH OTHER AND THE SEWER LINE IS LESS THAN 18 INCHES BELOW OR ABOVE THE WATER MAIN, THE SEWER LINE CROSSING SHALL BE P.V.C. PRESSURE PIPE CONFORMING TO AWWA C-900 OR ASTM D2241, FOR A DISTANCE OF 10' ON BOTH SIDES OF WATER LINE. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. 10. GROUNDWATER LEVELS SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING

OPERATIONS. ALL MANHOLES LOCATED WITHIN MLIMITS OF SEASONAL GROUNDWATER SHALL HAVE THE EXTERIOR OF ALL CONCRETE

SURFACES COATED WITH TWO COATS OF COAL TAR EPOXY. 11. THE TRENCH BACKFILL ABOVE THE PIPE ZONE WILL BE INSPECTED BY THE ACHD OR BY THE DEVELOPER'S ENGINEER IN ACCORDANCE WITH THE LATEST EDITION OF THE "CONSTRUCTION QUALITY ASSURANCE MANUAL". COMPACTION TESTS ARE REQUIRED IN THE BACKFILL ABOVE THE PIPE ZONE, WITHIN PUBLIC RIGHT-OF-WAY, ACCORDING TO ACHD REQUIREMENTS AND THE RESULTS SHALL BE SUBMITTED TO BOISE CITY PUBLIC WORKS

DEPARTMENT AND ACHD PRIOR TO FINAL ACCEPTANCE. 12. ALL STATIONING RELATES TO THE GRAVITY SEWER CENTERLINE.

ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS.

13. THE SEWER MAIN SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS. ALL SEWER LINES SHALL BE TELEVISED WITH A CLOSED CIRCUIT TELEVISION CAMERA IN ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS NO STANDING WATER SHALL BE PRESENT. 14. THE BOISE PUBLIC WORKS DEPARTMENT MAY TEST THE COMPACTION OF THE SEWER PIPELINE BEDDING. TESTING WILL BE DONE BY AN INDEPENDENT TESTING LABORATORY. THE COST OF THE FIRST TEST WILL BE PAID BY THE BOISE PUBLIC WORKS DEPARTMENT. IF THE FIRST TEST FAILS TO MEET REQUIRED COMPACTION, ALL RE—TESTING SHALL BE PAID BY THE SEWER CONTRACTOR. THE CONTRACTOR SHALL CONTACT THE BOISE PUBLIC WORKS DEPARTMENT AND/OR TESTING LABORATORY TO SCHEDULE THE TESTS PRIOR TO ANY PIPE LAYING AND BACKFILLING. 15. SEWER CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION:

. STANDARD MANHOLE - TYPE A, DRAWING NO. SD-501. . STANDARD SHALLOW MANHOLE, DRAWING NO. SD-505. MANHOLE COLLAR DETAIL, DRAWING NO. SD-508.

. MANHOLE COVER & FRAME, DRAWING NO. SD-507. 5. STANDARD SEWER SERVICE LINE, DRAWING NO. SD-511-A.

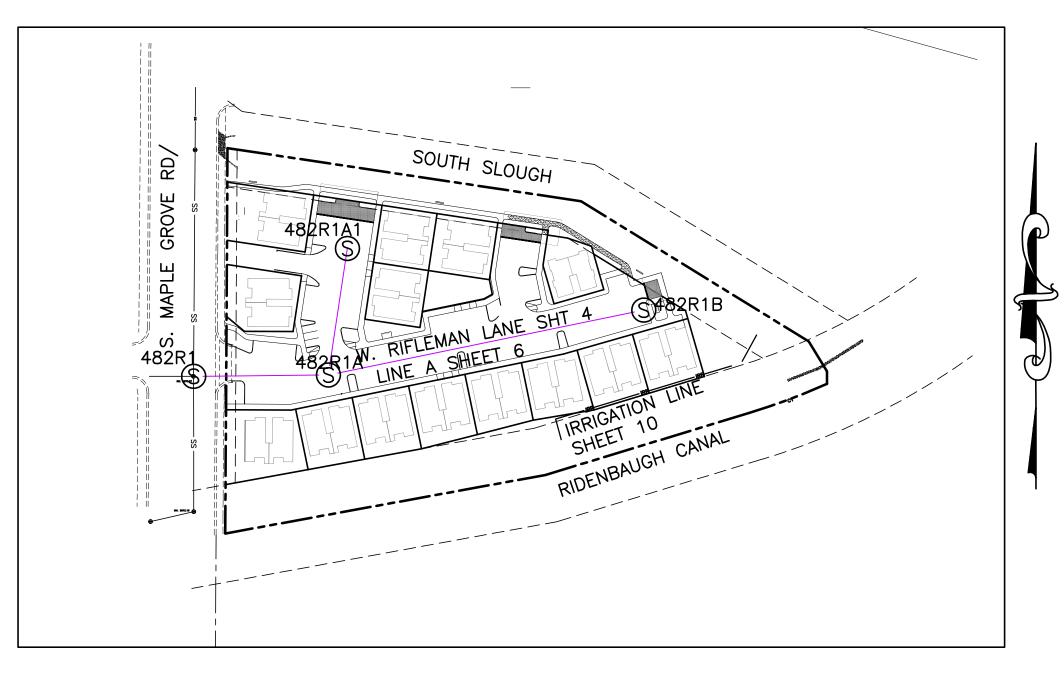
5. SEWER SERVICE MARKER. DRAWING NO. SD-512.

16. THE CONTRACTOR SHALL LEAVE THE EXCAVATION FOR THE UPSTREAM END OF ALL SERVICE LINES OPEN FOR FIELD VERIFICATION OF THE INVERT ELEVATION BY THE CITY'S INSPECTOR. THE CONTRACTOR SHALL NOT BACKFILL THE ENDS OF SERVICE LINES UNTIL HE HAS OBTAINED APPROVAL FROM BOISE CITY'S INSPECTOR OR MADE OTHER ARRANGEMENTS FOR THE VERIFICATION OF SERVICE LINE INVERT ELEVATIONS. 17. THE CONTRACTOR SHALL PROVIDE BOISE CITY'S INSPECTOR WITH "CUT SHEETS" FOR THE STAKING PROVIDED FOR CONSTRUCTION OF THE SANITARY SEWER. "CUT SHEETS" SHALL BE PROVIDED TO THE CITY PRIOR TO CONSTRUCTION.

ADDITIONALLY, TEMPORARY BENCH MARKS MUST BE PROVIDED TO THE BOISE CITY DEPARTMENT OF PUBLIC WORKS, INSPECTION SECTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 18. THE CONTRACTOR SHALL INSTALL A REMOVABLE PLUG UPSTREAM OF SSMH 482R1 BETWEEN SSMH 482R1 AND SSMH 482R1A. THESE PLUGS SHALL REMAIN IN PLACE DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THIS SEWER PROJECT. 19. THE CONTRACTOR SHALL CONSTRUCT THE SANITARY SEWER IN ACCORDANCE WITH THE STAMPED PLANS APPROVED BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. THESE PLANS WILL BE PROVIDED TO THE CONTRACTOR BY THE PROJECT INSPECTOR PRIOR TO CONSTRUCTION. WORK SHALL NOT BE DONE WITHOUT THE CURRENT SET OF APPROVED

20. PRIOR TO CONSTRUCTION, TEMPORARY BENCHMARKS (TBM'S) SHALL BE SET IN THE FIELD BY A LICENSED SURVEYOR OR ENGINEER AND SHALL BE FLAGGED AND CLEARLY VISIBLE FROM ALL DIRECTIONS. A TBM SHALL BE LOCATED WITHIN 100-FEET OF TIE-IN TO EXISTING SEWER AND SPACED NO GREATER THAN 500-FEET ALONG THE SEWER ALIGNMENT THERE AFTER. TBM'S SHALL HAVE ELEVATIONS TIED TO THE NAVD 1988 DATUM.

1. SEE UNITED WATER PLAN FOR ALL WATER SYSTEM CONSTRUCTION.



STREET & SEWER INDEX MAP

-NTS-

WINSMORE MKTPLACE AMD PAGE 9658

R-3D/DA

SYRINGA PARK

EXISTING FIRE HYDRANT CATCH BASIN - ISPWC

GENERAL LEGEND

STATION

ELEVATION

EXISTING SEWER LINE

EXISTING WATER LINE

NEW PRESSURE IRRIGATION LINE

EXISTING EDGE OF PAVEMENT

NEW EDGE OF PAVEMENT

ROADWAY CENTER LINE

EASEMENT BOUNDARY

EXISTING CONTOUR

FINAL GRADE CONTOUR

POINT (TOP BACK OF ROLLED

CURB UNLESS OTHERWISE NOTED)

TVC = TOP BACK VERTICAL CURB

TRLC = TOP REVERSE LIP CURB

EI = END INVERT SEWER SERVICE

EXISTING SANITARY SEWER MANHOLE

PC = POINT OF CURVATURE

PT = POINT OF TANGENCY

FL = GUTTER FLOW LINE

SANITARY SEWER MANHOLE

6" SEWER SERVICE LINE

TYPICAL WATER SERVICE

PROPOSED FIRE HYDRANT

GB = GRADE BREAK

GC = GRADE CHANGE

ELEVATION @ STATION

AC = ASPHALT

ROADWAY RIGHT-OF-WAY

NEW STORM DRAIN

NEW WATER LINE

NEW SEWER LINE

EXISTING FENCE

SAW CUT LINE

BOUNDARY LINE

LOT LINE

W/SERVICE

SD-601 W/12" SUMP DIRECTION OF DRAINAGE FLOW

STREET LIGHT EXISTING DECIDUOUS TREE (CALIPER)

EXISTING POWER LINE & POLE

VICINITY MAP

R-2

R-3D

UNPLATTED

FINCH LATERAL

PAGE 7361"

MAPLE GROVE ESTATES MH

WE\$TPARK

INDUSTRIAL NO. 7

PAGE 4144

W. EMERALD, ST

I UNPLATTED

NAVD 1988 DATUM

EMERALD PARK

1" = 600'

PLAN SHEET INDEX

SHEET DESCRIPTION

W. EMERALD ST.

COVER SHEET, INDEX, VICINITY MAP, & NOTES

DEVELOPMENT PLANS FOR

ASHEVILLE SUBDIVISION

A PORTION OF THE NW 1/4 OF SECTION 12

TOWNSHIP 3 NORTH, RANGE 1 EAST, BOISE MERIDIAN,

BOISE, ADA COUNTY, IDAHO

2013

FINAL PLAT

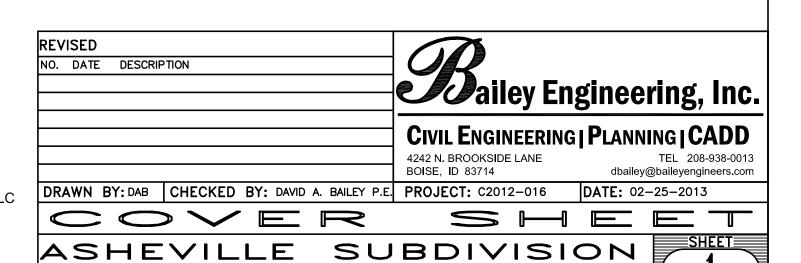
SITE UTILITY AND DIMENSION PLAN SITE GRADING PLAN

GRADING AND DRAINAGE DETAILS SITE DETAILS

SEWER PLAN & PROFILE SEWER PLAN & PROFILE

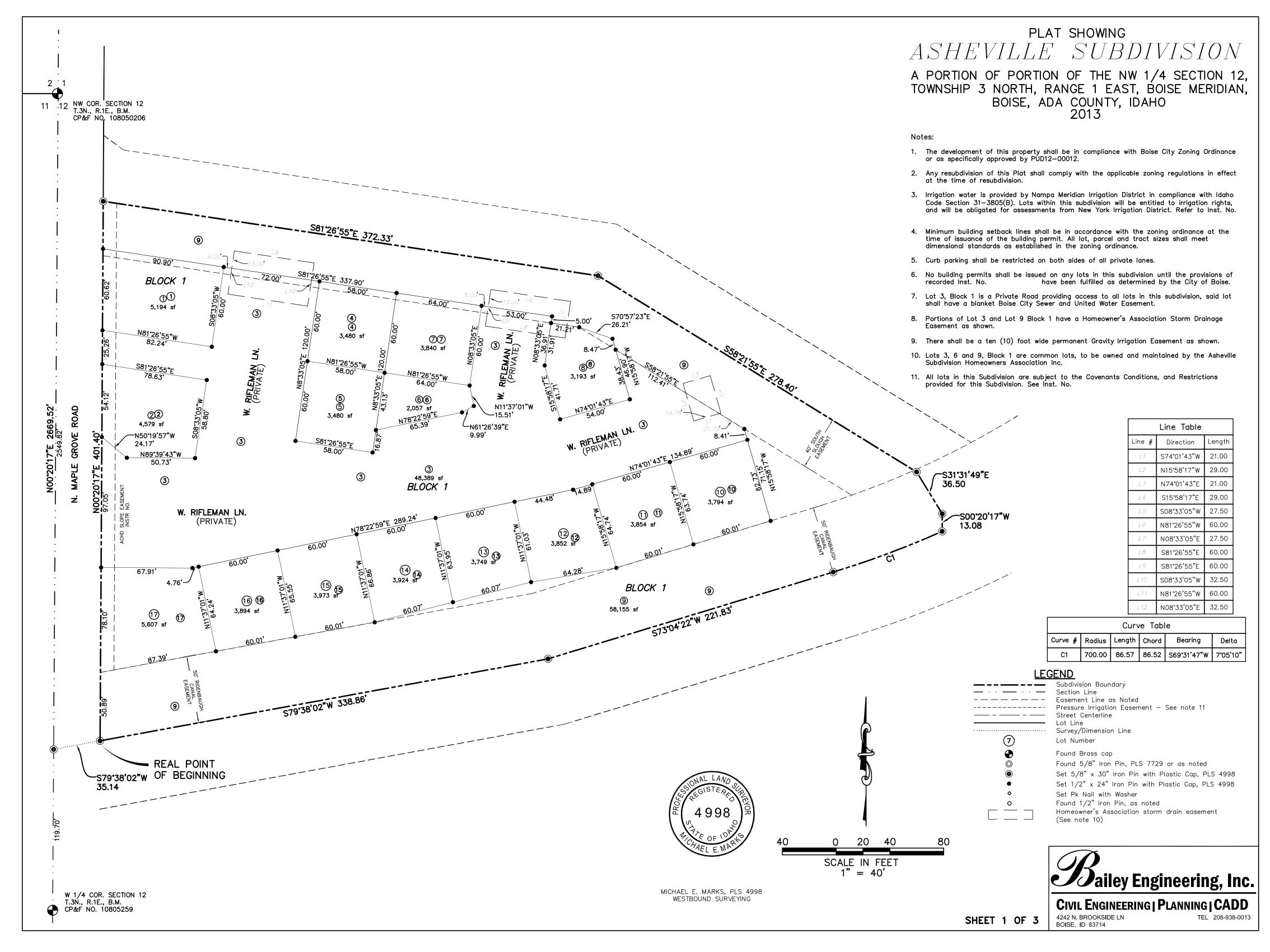
UNITED WATER PLAN

GRAVITY IRRIGATION AND PUMP STATION



IRON MOUNTAIN REAL ESTATE LLC

DEVELOPER IRON MOUNTAIN REAL ESTATE, LLC 3681 N. LOCUST GROVE ROAD SUITE 100 MERIDIAN, ID 83646 (208) 895-0500



THE PLAT HAS BEEN ADDED TO THE CONSTRUCTION SET FOR REFERENCE PURPOSES ONLY. FOR EXACT INFORMATION REFER TO THE RECORDED PLAT OF ASHEVILLE SUBDIVISION

TOTAL LOTS: 36

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY_____DAT ADA COUNTY HIGHWAY DISTRICT REVISED

NO. DATE DESCRIPTION

CIVIL ENGINEERING | PLANNING | CADD

4242 N. BROOKSIDE LANE
BOISE, ID 83714

DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E. PROJECT NO. C2012-0DATE: 02-25-2013

ASHEVILLE SUBDIVISION IRON MOUNTAIN REAL ESTATE

ASHEVILLE SUBDIVISION

CERTIFICATE OF OWNERS

Know all men by these presents: That Iron Mountain Real Estate, LLC., an Idaho Limited Liability Company, is the owner of the property described as

A PARCEL OF LAND BEING A PORTION OF THE NW 1/4 OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 1 EAST OF THE BOISE MERIDIAN, BOISE, ADA COUNTY, IDAHO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING A THE SOUTHWEST CORNER OF THE NW 1/4 (W 1/4 CORNER) OF SECTION 12, T.3N., R.1E., B.M.;

THENCE N00°20'17"E 119.70 FEET ALONG THE WEST LINE OF THE NW 1/4 OF SECTION 12 TO A POINT ON THE CENTERLINE OF THE RIGENBAUGH CANAL;

THENCE N79°38'02"E 35.14 FEET ALONG SAID CENTERLINE TO A POINT ON THE EASTERLY RIGHT OF WAY OF N. MAPLE GROVE ROAD, THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE N00°20'17"E 401.40 FEET ALONG SAID RIGHT OF WAY TO A POINT ON THE CENTERLINE OF THE SOUTH SLOUGH;

ALONG THE CENTERLINE OF THE SOUTH SLOUGH THE FOLLOWING:

THENCE S81°26'55"E 372.33 FEET TO A POINT;

THENCE S58°21'55"E 278.40 FEET TO A POINT;

THENCE S31°31'49"E 36.50 FEET TO A POINT;

LEAVING THE CENTERLINE OF THE SOUTH SLOUGH;

THENCE S00°20'17"W 13.08 FEET TO A POINT ON A CURVE ON THE CENTERLINE OF THE RIDENBAUGH CANAL THE FOLLOWING:

THENCE 86.57 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 700.00 FEET, A DELTA ANGLE OF 07°05'10" AND A CHORD BEARING S69°31'47" W 86.52 FEET TO A POINT OF TANGENCY;

THENCE S73°04'22"W 221.83 FEET TO A POINT;

THENCE S79°38'02" W 338.86 FEET TO THE REAL POINT OF BEGINNING OF THIS DESCRIPTION, COMPRISING 3.79 ACRES, MORE OR LESS.

It is the intention of the undersigned to hereby include the above described property in this plat. The easements and Private Roads as shown on this plat are not dedicated to the public. However, the right to use said easements is hereby perpetually reserved for public utilities and such other uses as designated within this plat, and no permanent structures are to be erected within the lines of said easements. All lots in this plat will be eligible to receive water service from an existing United Water Idaho, Inc. main line located adjacent to the subject subdivision, and United Water Idaho, Inc. has agreed in writing to serve all the lots in this subdivision.

Iron Mountain Real Estate LLC.

Kevin Amar, Member

CERTIFICATE OF SURVEYOR

My commission expires

I, Gregory G. Carter, do hereby certify that I am a Professional Land Surveyor licensed by the State of Idaho, and that this plat as described in the "Certificate of Owners" was drawn from an actual survey made on the ground under my direct supervision and accurately represents the points platted thereon, and is in conformity with the State of Idaho Code relating to plats and surveys.



ACKNOWL State of Idaho County of Ada)) s.s.					
Amar, known	or identified to me to no executed the inst	be a Member of I	Iron Mountain Real Estate, LL	.C., the Limited Liability C	for said State, personally appe Company that executed the insome that such Limited Liability	strument or
In witness whe	ereof, I have hereun	to set my hand and	d affixed my official seal the c	lay and year in this certifi	icate first above written.	

Notary Public for Idaho

Residing in _____, Idaho

Sailey Engineering, Inc. Civil Engineering | Planning | CADD SHEET 2 OF 3 4242 N. BROOKSIDE LN BOISE, ID 83714

ASHEVILLE SUBDIVISION

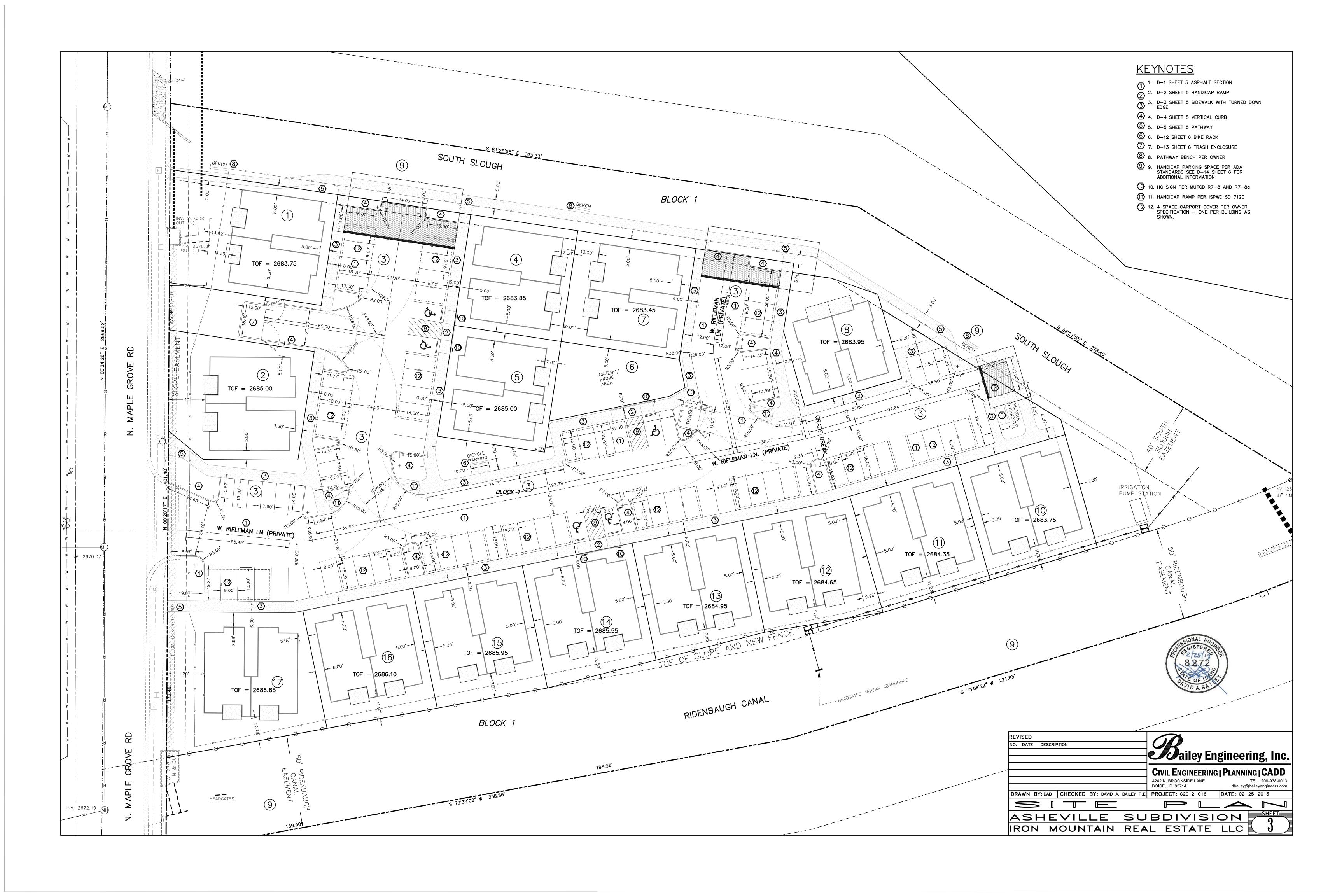
EALTH CERTIFICATE	CERTIFICATE OF COUNTY SURVEYOR		
nitary restrictions as required by Idaho Code, Title 50, Chapter 13 have been satisfied based on a review by a salified Licensed Professional Engineer (QLPE) representing Boise City Public Works and United Water of Idaho, and the QLPE approval of the design plans and specifications and the conditions imposed on the developer for attinued satisfaction of the sanitary restrictions. Buyer is cautioned that at the time of this approval, no drinking ter extensions or sewer extensions were constructed. Building construction can be allowed with appropriate lding permits if drinking water extensions or sewer extensions have since been constructed or if the developer is	I, the undersigned, County Surveyor in and for Ada County, Idaho, do hereby certify that I have checked this plat and the complies with the State of Idaho Code relating to plats and surveys.		
nultaneously constructing those facilities. If the developer fails to construct facilities, then sanitary restrictions may reimposed, in accordance with Section 50-1326, Idaho Code, by the issuance of a Certificate of Disapproval, and construction of any building or shelter requiring drinking water or sewer/septic facilities shall be allowed.	County Surveyor		
Central District Health Department Date	CERTIFICATE OF COUNTY TREASURER		
APPROVAL OF ADA COUNTY HIGHWAY DISTRICT	I, the undersigned, County Treasurer in and for the County of Ada, State of Idaho, per the requirements of I.C.50-1308 do		
The foregoing plat was accepted and approved by the Board of Ada County Highway District Commissioners on the day of, 20	hereby certify that any and all current and/or delinquent county property taxes for the property included in this subdivision have been paid in full. This certification is valid for the next thirty (30) days only.		
Chairman ACHD	Date County Treasurer		
APPROVAL OF CITY ENGINEER I, the undersigned, Boise City Engineer, hereby state that the conditions of Boise City have been satisfied for Asheville Subdivision.			
	COUNTY RECORDER'S CERTIFICATE		
City Engineer Date	State of Idaho)) s.s. County of Ada)		
APPROVAL OF CITY COUNCIL	I hereby certify that this instrument was filed for record at the request of at at at at flatered past O'clockM. on this day of, 20, in Book of platered pages		
I, the undersigned, City Clerk in and for the City of Boise, Ada County, Idaho do hereby certify that at a regular meeting of the City Council held on the day of, 20, this plat was duly accepted and approved.	Instrument No		
	Deputy Ex-Officio Recorder		
City Clerk, Boise, Idaho	Fee		
	LE CONTERED TO SUPPLY OF THE S		

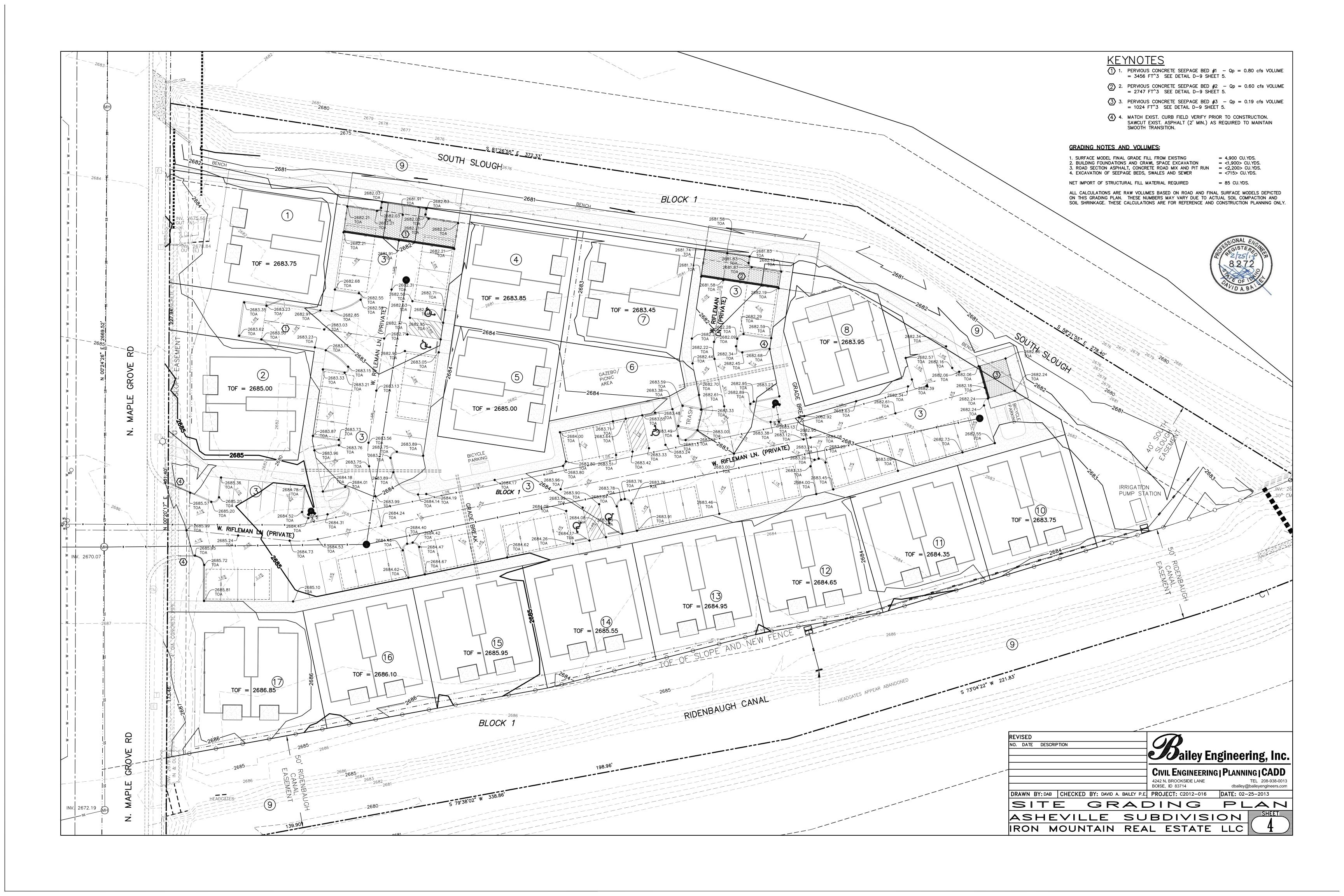


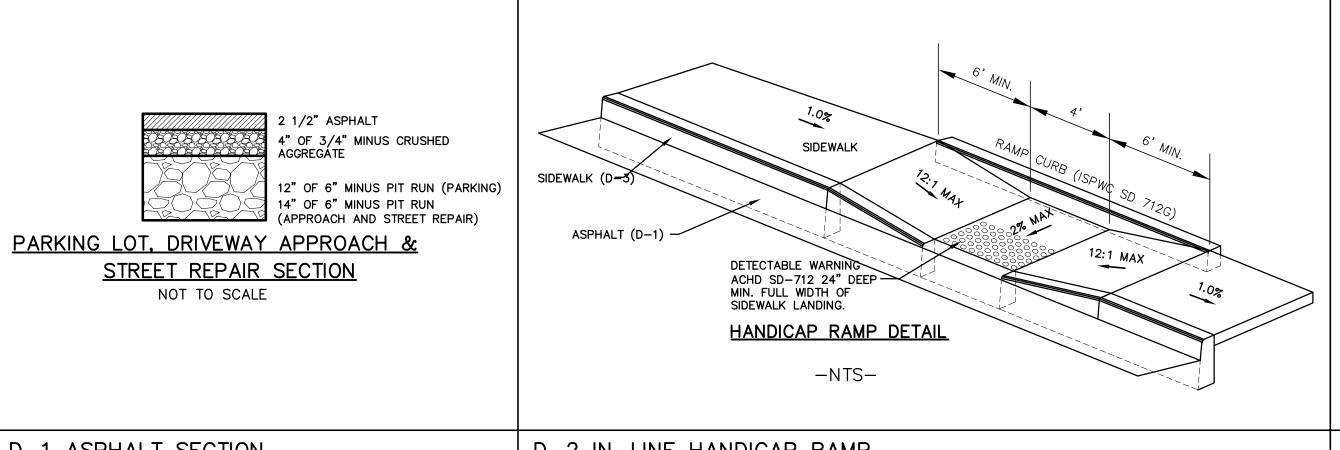
Sailey Engineering, Inc. CIVIL ENGINEERING | PLANNING | CADD

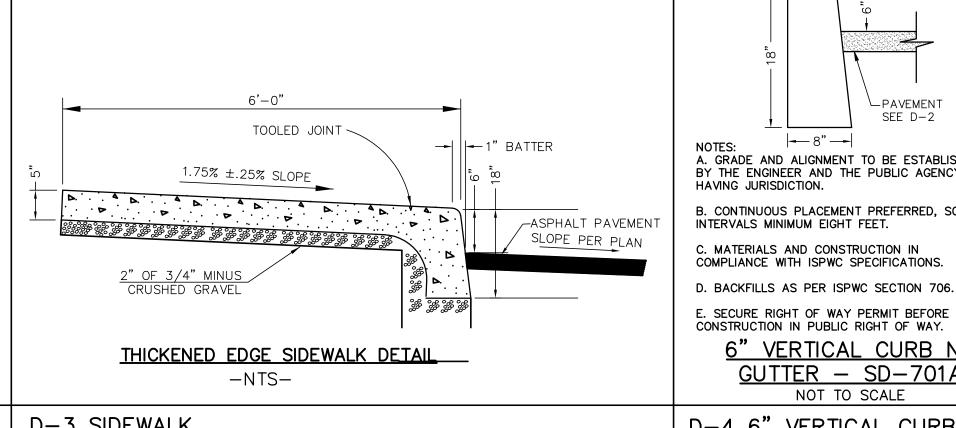
4242 N. BROOKSIDE LN
BOISE, ID 83714

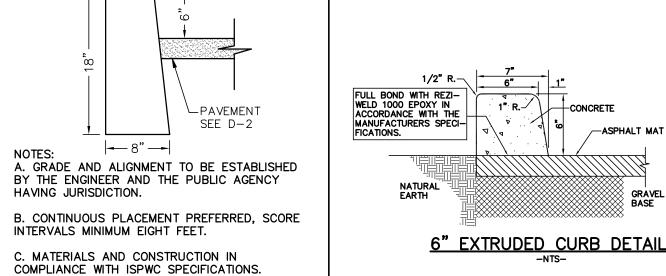
TEL 208-938-0013



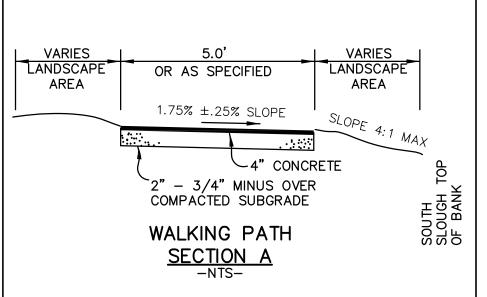








THIS DETAIL IS SHOWN AS ALTERNATE TO VERTICAL CURB DETAIL THIS SHEET. CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER IN WRITING FOR ALL PROPOSED LOCATIONS.



D-1 ASPHALT SECTION

NOT TO SCALE

D-2 IN-LINE HANDICAP RAMP

D-3 SIDEWALK

D-4 6" VERTICAL CURB

E. SECURE RIGHT OF WAY PERMIT BEFORE

6" VERTICAL CURB NO

GUTTER - SD-701A NOT TO SCALE

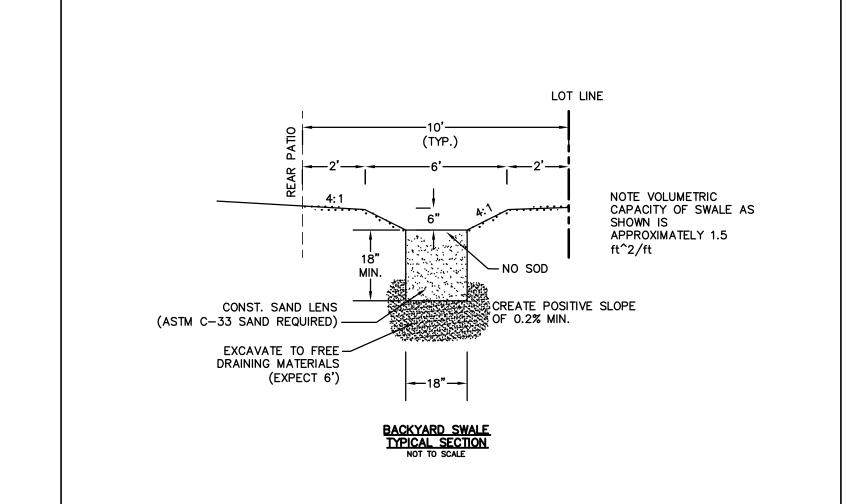
|--6" --|

D-4ALT EXTRUDED CURB

D-5 PATHWAY

NO SOD -6" SANDY .5:1 SOIL 2" WASHED DRAIN " HDPE CORRUGATED PERFORATED DRAINAGE PIPE CONTINUOUS 6" OF CRUSHED — TEE CONNECT ALL GRAVEL AROUND PIPE ROOF DRAINS SEE D-11 THIS SHEET CREATE POSITIVE SLOPE CONST. 18" SAND LENS OF 0.2% MIN. SEE PLAN (ASTM C-33 SAND REQUIRED) FOR DIRECTION EXCAVATE TO FREE DRAINING MATERIALS INFILTRATION SWALE SECTION NOT TO SCALE

D-10 PERVIOUS CONCRETE AND SEEPAGE BEDS



PERVIOUS AREA SEEPAGE BEDS						
DRAINAGE AREA	LENGTH	WIDTH	DEPTH	NET CAPACITY	TOP OF PERV CONCRETE	BOTTOM OF ROCK
PCDA-1	32	60	3.80	3456	2681.91	2677.61
PCDA-2	27	60	3.50	2747	2681.58	2677.58
PCDA-3	63	10	3.50	1024	2682.18	2678.18

1. DRAINAGE CONTRACTOR SHALL INSTALL 2" SCH 80 WATER CLASS PIPE CONDUITS THROUGH THE SEEPAGE TRENCHES FOR WATER LINES, UNDERGROUND POWER LINES, GAS LINES AND TELEPHONE LINES. SEWER SERVICES SHALL BE PLACED IN 6" DIA. SCH 80 WATER CLASS PIPE THROUGH SEEPAGE TRENCHES. THE PRECISE LOCATION, DEPTH AND SIZE SHALL BE DETERMINED BY THE ENGINEER.

2. NO GROUNDWATER WAS ENCOUNTERED IN TEST EXCAVATIONS ON THIS SITE. IF GROUNDWATER IS ENCOUNTERED HIGHER THAN INDICATED ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR REDESIGN OF SEEPAGE TRENCHES TO PROVIDE 3' MINIMUM CLEARANCE BETWEEN GROUNDWATER AND THE BOTTOM OF THE TRENCH. UNTIMELY NOTIFICATION OF THE ENGINEER MAY RESULT IN ADDITIONAL COSTS TO THE CONTRACTOR. REFER TO GEOTECHNICAL REPORT PREPARED BY M.T.I. DATED DECEMBER 14, 2012. ESTIMATED HIGH GROUNDWATER ELEVATION DEEPER THAN 2672

3. ALL MONITOR WELLS SHALL HAVE A CONCRETE APRON POURED AROUND THE CAP.

4. PERCOLATION RATE FOR SEEPAGE TRENCHES 8" PER. HOUR

5. WHEN ROCK IS ENCOUNTERED CONTRACTOR TO HAVE PERCOLATION TEST PERFORMED BY SOILS ENGINEER AFTER SEEPAGE TRENCH IS FULLY EXCAVATED. IF THE PERCOLATION IS LESS THAN SPECIFIED BY THE SOILS REPORT AND ENGINEER, CONTRACTOR WILL NEED TO BLAST TO CREATE CRACKS IN ROCK FOR DRAINAGE TO OCCUR OR REDESIGN THE SYSTEM TO ACHIEVE THE REQUIRED CRITERIA.

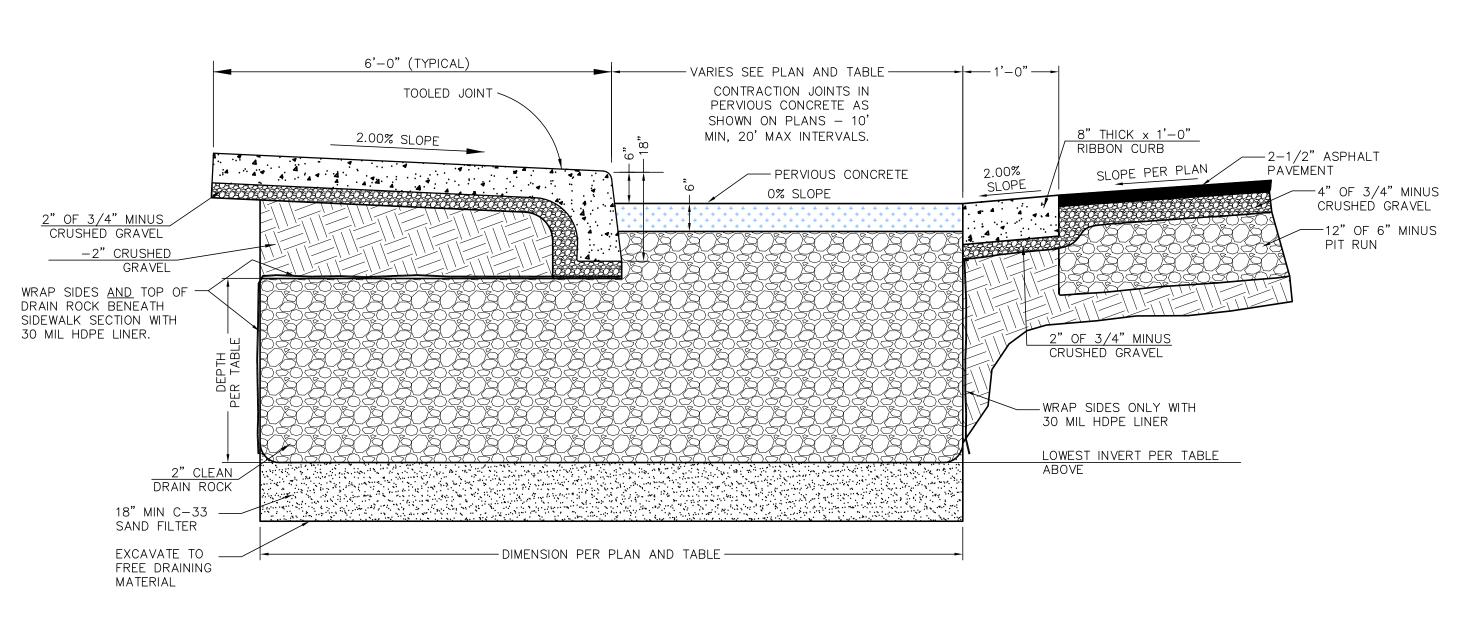
CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF GROUNDWATER IS ENCOUNTERED WITHING 3 FEET OF THE BOTTOM OF DESIGN ELEVATION FOR ANY INFILTRATION

D-6 INFILTRATION SWALE

D-7 BACK YARD SWALE

D-8 SEEPAGE BED DIMENSIONS

D-9 SEEPAGE BED NOTES



PERVIOUS CONCRETE

- 1. WORK ON ASHEVILLE SUBDIVSION PERVIOUS CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 522.1, 'SPECIFICATION FOR PERVIOUS CONCRETE PAVEMENT,' PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS MICHIGAN, EXCEPT AS MODIFIED BY THESE CONTRACT
- 2. CONTRACTOR SHALL SUBMIT DRAWINGS AND DOCUMENTATION AS REQUIRED BY ACI 522.1 FOR ACCEPTANCE BY THE ENGINEER TO INCLUDE:
 - PERVIOUS CONCRETE MIXTURE PROPORTIONS AND DENSITY
 - QUALIFICATIONS AND EXPERIENCE OF CONTRACTOR IN PLACING PERVIOUS CONCRETE. - IN-PLACE PAVEMENT RESULTS FROM PREVIOUS WORK, PREFERABLY WITHIN THE PREVIOUS 12 MONTHS.
 - IF PREVIOUS WORK EXAMPLES ARE NOT ACCEPTABLE TO ENGINEER, CONTRACTOR SHALL PROVIDE TEST PANELS AND EVALUATION RESULTS AS REQUIRED BY ACI 522.1.
- TRANSPORTATION, PLACEMENT AND FINISHING PLAN, INCLUDING PERSONNEL AND EQUIPMENT REQUIRED. 3. TWO CORES SHALL BE REMOVED FROM EACH DRAINAGE AREA PANEL DEFINED ON THE MAP. THE RESULTS OF THE TESTS DESCRIBED IN ACI 522.1
- SHALL BE REPORTED TO THE OWNER AND ENGINEER PRIOR TO FINAL ACCEPTANCE. 4. CONTRACTION JOINTING PER ACI 522.1 SHALL BE PERPENDICULAR TO PANELS AT 20' MAXIMUM AND 10' MINIMUM INTERVALS ALONG EACH
- DRAINAGE AREA PANEL.

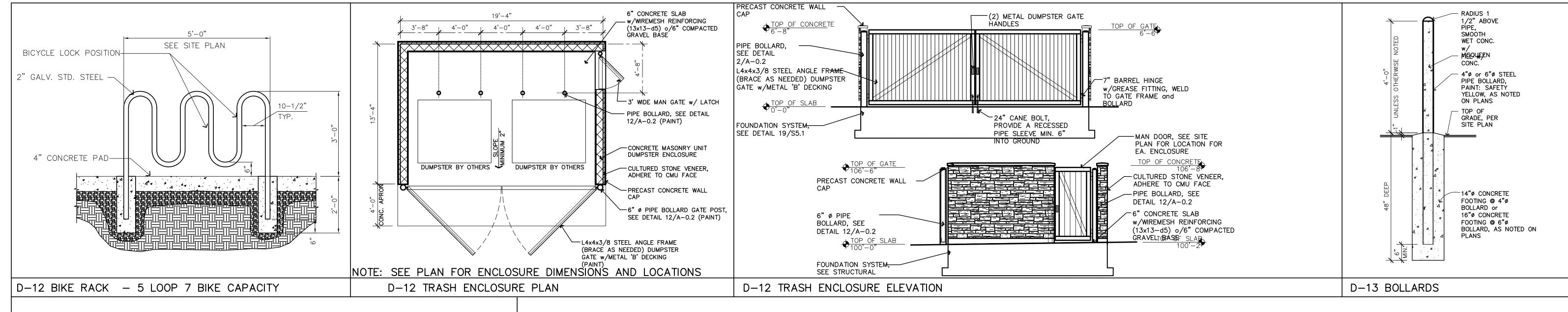
D-11 PERVIOUS CONCRETE

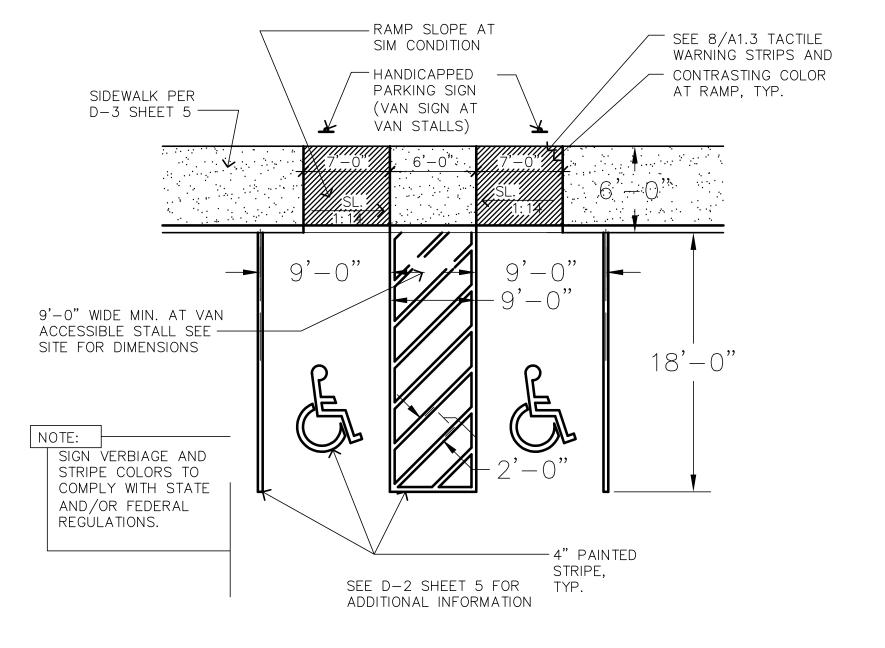
5. SEE DETAILS SHEET 5 FOR ADDITIONAL INFORMATION. 6. INSPECTIONS AND FINAL ACCEPTANCE OF PERVIOUS CONCRETE CONSTRUCTION SHALL BE BY BAILEY ENGINEERING, INC.



REVISED NO. DATE DESCRIPTION	Sailey Engineering, Inc.
	CIVIL ENGINEERING PLANNING CADD 4242 N. BROOKSIDE LANE BOISE, ID 83714 TEL 208-938-0013 dbailey@baileyengineers.com
DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E.	PROJECT: C2012-016 DATE: 02-25-2013
SITE AND DRA	INAGE DETAILS
ASHEVILLE SU	BDIVISION
IRON MOUNTAIN REA	L ESTATE LLC 5

PERVIOUS CONCRETE AND SEEPAGE BEDS -NTS-

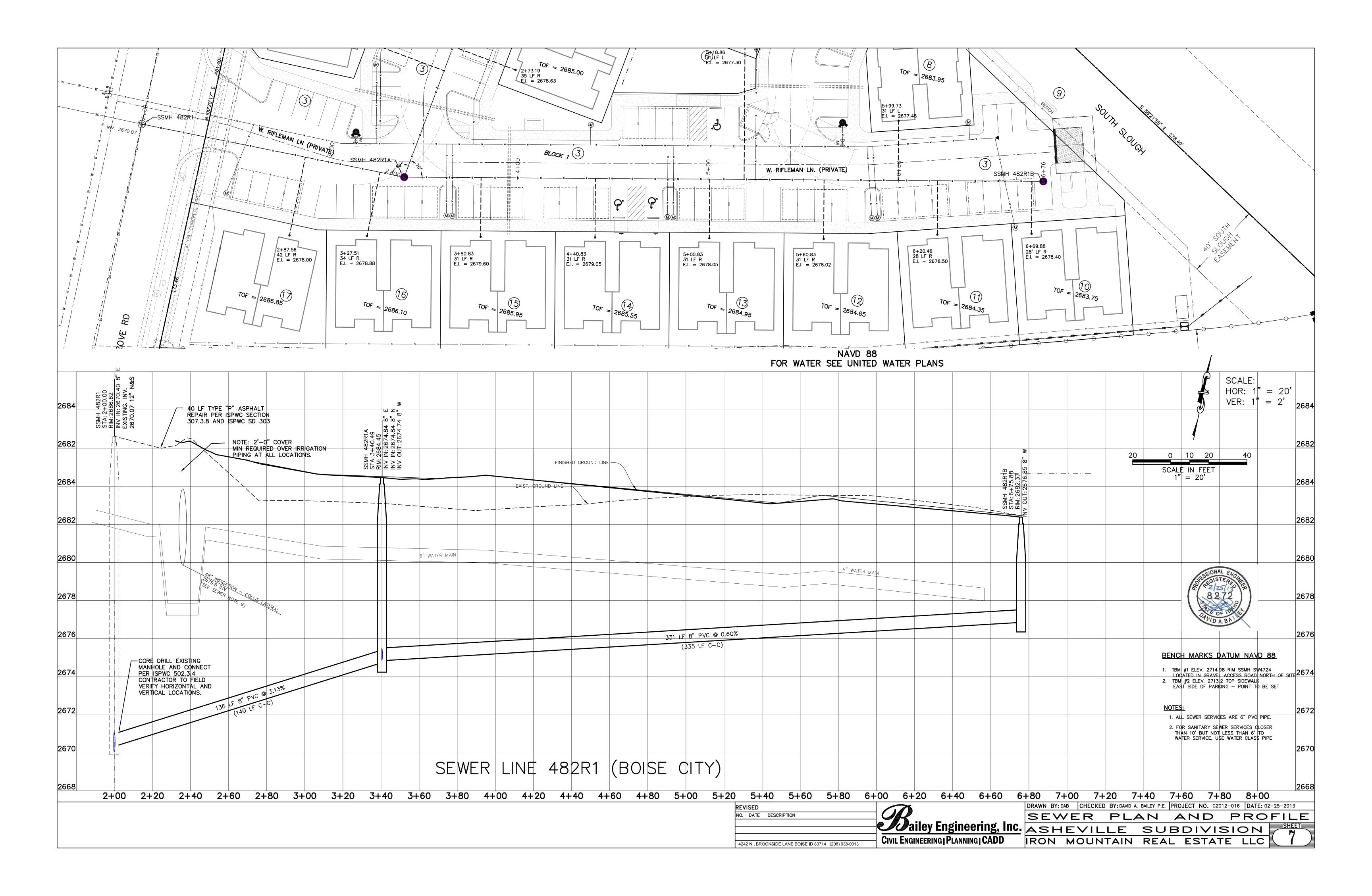


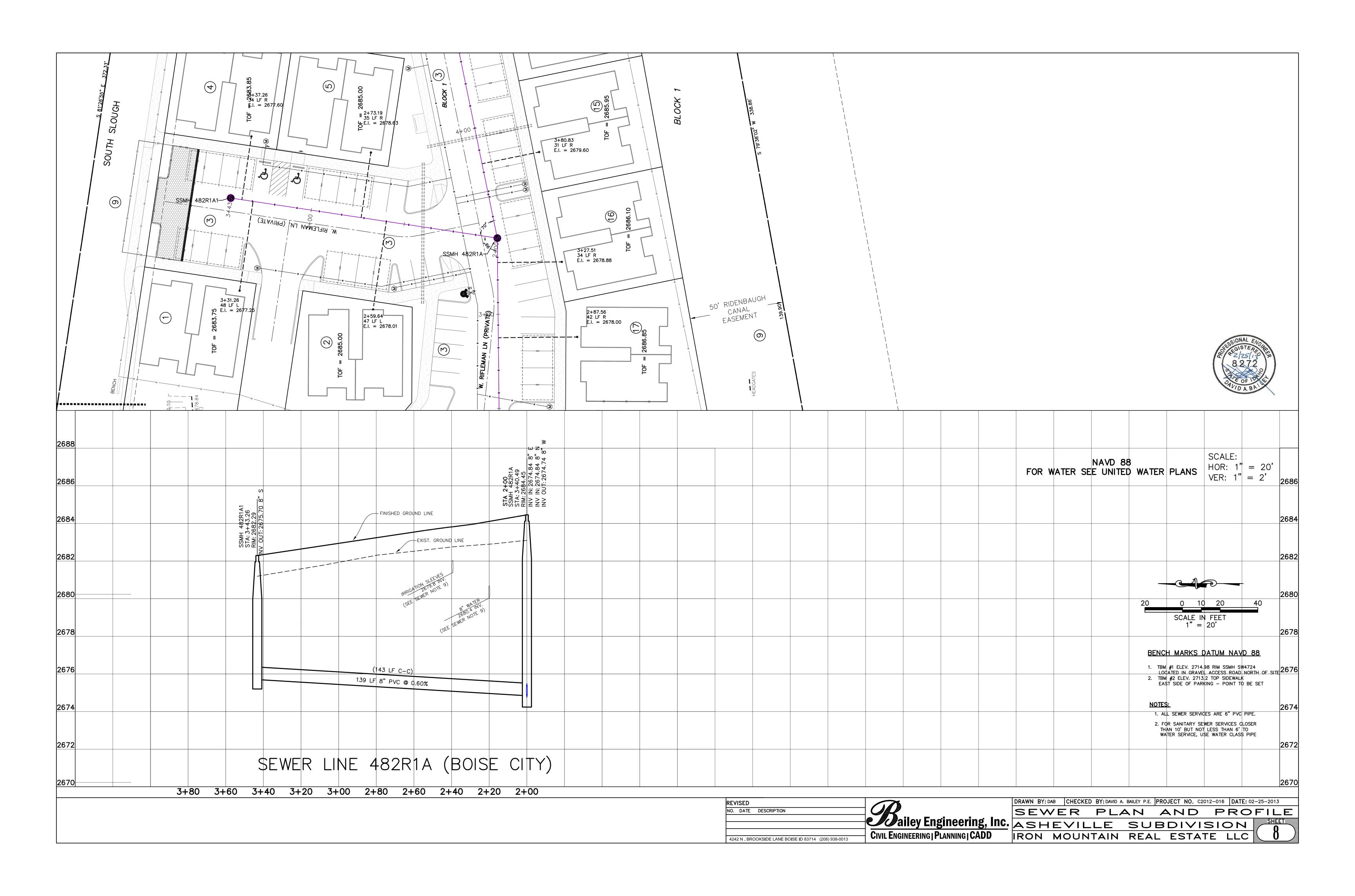


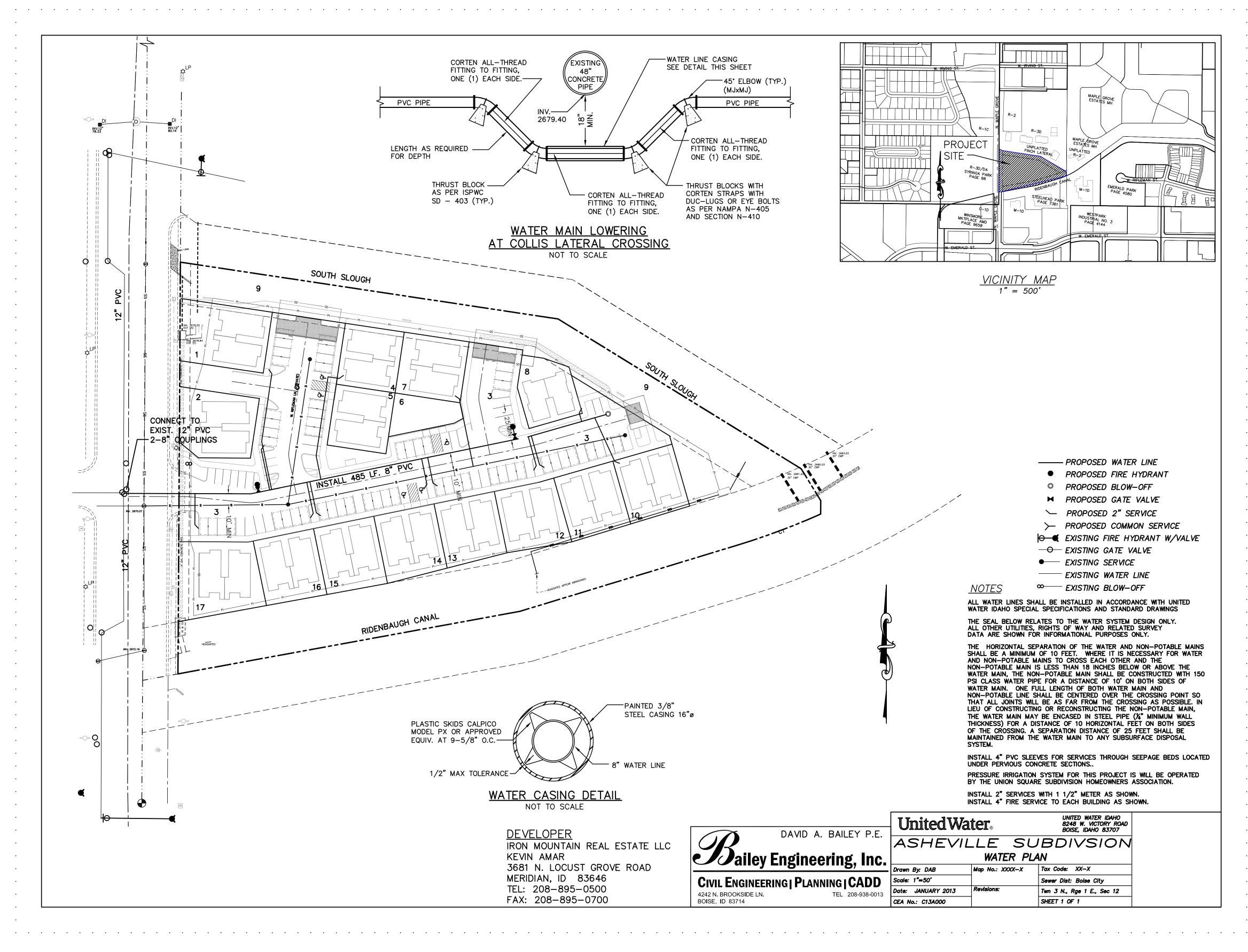
D-14 HANDICAP STALLS



REVISED	
NO. DATE DESCRIPTION	
	ailey Engineering, Inc.
	CIVIL ENGINEERING PLANNING CADD
	4242 N. BROOKSIDE LANE TEL 208-938-0013
	BOISE, ID 83714 dbailey@baileyengineers.com
DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E.	PROJECT: C2012-016 DATE: 02-25-2013
SITE AND DRA	INAGE DETAILS
ASHEVILLE SU	BDIVISION SHEET
IRON MOUNTAIN REA	L ESTATE LLC 0







NOTE:

THIS SHEET IS INCLUDED IN THE PLAN SET FOR CONVENIENCE ONLY — ALL APPROVALS AND CONSTRUCTION SHALL REFER TO THE OFFICIAL UNITED WATER IDAHO APPROVED PLAN

Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY_____DATE:___ ADA COUNTY HIGHWAY DISTRICT REVISED

NO. DATE DESCRIPTION

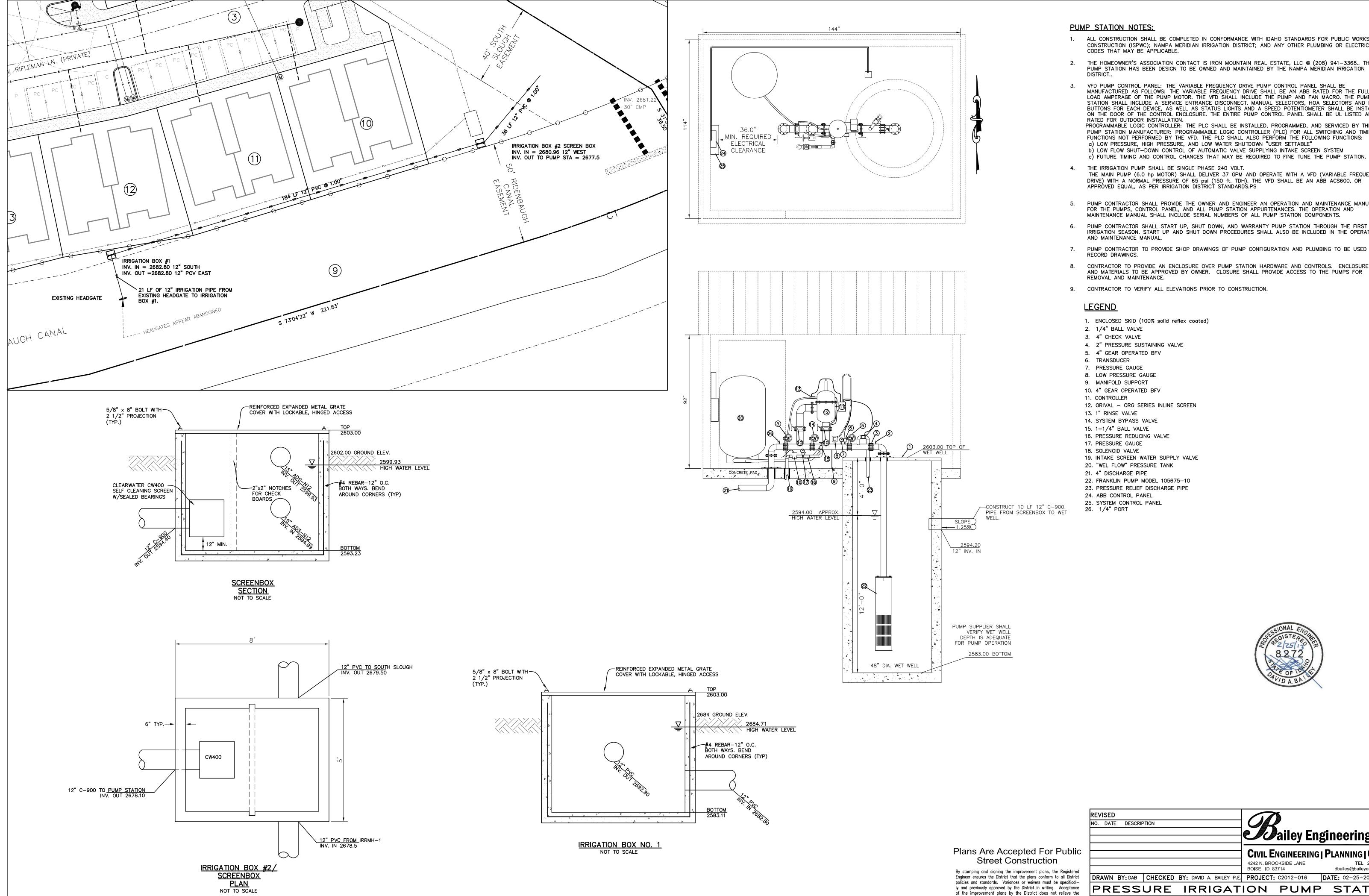
CIVIL ENGINEERING | PLANNING | CADD

4242 N. BROOKSIDE LANE
BOISE, ID 83714 dbailey@baileyengineers.com

DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E. PROJECT: C2012-016 DATE: 02-25-2013

UNITED WATER IDAHO PLAN

ASHEVILLE SUBDIVISION IRON MOUNTAIN REAL ESTATE LLC



PUMP STATION NOTES:

- 1. ALL CONSTRUCTION SHALL BE COMPLETED IN CONFORMANCE WITH IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC); NAMPA MERIDIAN IRRIGATION DISTRICT; AND ANY OTHER PLUMBING OR ELECTRICAL CODES THAT MAY BE APPLICABLE.
- 2. THE HOMEOWNER'S ASSOCIATION CONTACT IS IRON MOUNTAIN REAL ESTATE, LLC @ (208) 941-3368.. THIS PUMP STATION HAS BEEN DESIGN TO BE OWNED AND MAINTAINED BY THE NAMPA MERIDIAN IRRIGATION
- VFD PUMP CONTROL PANEL: THE VARIABLE FREQUENCY DRIVE PUMP CONTROL PANEL SHALL BE MANUFACTURED AS FOLLOWS: THE VARIABLE FREQUENCY DRIVE SHALL BE AN ABB RATED FOR THE FULL LOAD AMPERAGE OF THE PUMP MOTOR. THE VFD SHALL INCLUDE THE PUMP AND FAN MACRO. THE PUMP STATION SHALL INCLUDE A SERVICE ENTRANCE DISCONNECT, MANUAL SELECTORS, HOA SELECTORS AND RESET BUTTONS FOR EACH DEVICE, AS WELL AS STATUS LIGHTS AND A SPEED POTENTIOMETER SHALL BE INSTALLED ON THE DOOR OF THE CONTROL ENCLOSURE. THE ENTIRE PUMP CONTROL PANEL SHALL BE UL LISTED AND RATED FOR OUTDOOR INSTALLATION. PROGRAMMABLE LOGIC CONTROLLER: THE PLC SHALL BE INSTALLED, PROGRAMMED, AND SERVICED BY THE PUMP STATION MANUFACTURER: PROGRAMMABLE LOGIC CONTROLLER (PLC) FOR ALL SWITCHING AND TIMING FUNCTIONS NOT PERFORMED BY THE VFD. THE PLC SHALL ALSO PERFORM THE FOLLOWING FUNCTIONS: a) LOW PRESSURE, HIGH PRESSURE, AND LOW WATER SHUTDOWN "USER SETTABLE" b) LOW FLOW SHUT-DOWN CONTROL OF AUTOMATIC VALVE SUPPLYING INTAKE SCREEN SYSTEM
- THE IRRIGATION PUMP SHALL BE SINGLE PHASE 240 VOLT. THE MAIN PUMP (6.0 hp MOTOR) SHALL DELIVER 37 GPM AND OPERATE WITH A VFD (VARIABLE FREQUENCY DRIVE) WITH A NORMAL PRESSURE OF 65 psi (150 ft. TDH). THE VFD SHALL BE AN ABB ACS600, OR APPROVED EQUAL, AS PER IRRIGATION DISTRICT STANDARDS.PS
- PUMP CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER AN OPERATION AND MAINTENANCE MANUAL FOR THE PUMPS, CONTROL PANEL, AND ALL PUMP STATION APPURTENANCES. THE OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE SERIAL NUMBERS OF ALL PUMP STATION COMPONENTS.
- PUMP CONTRACTOR SHALL START UP, SHUT DOWN, AND WARRANTY PUMP STATION THROUGH THE FIRST FULL IRRIGATION SEASON. START UP AND SHUT DOWN PROCEDURES SHALL ALSO BE INCLUDED IN THE OPERATIONS
- PUMP CONTRACTOR TO PROVIDE SHOP DRAWINGS OF PUMP CONFIGURATION AND PLUMBING TO BE USED IN
- 8. CONTRACTOR TO PROVIDE AN ENCLOSURE OVER PUMP STATION HARDWARE AND CONTROLS. ENCLOSURE TYPE AND MATERIALS TO BE APPROVED BY OWNER. CLOSURE SHALL PROVIDE ACCESS TO THE PUMPS FOR REMOVAL AND MAINTENANCE.
- 9. CONTRACTOR TO VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION.

- 1. ENCLOSED SKID (100% solid reflex coated)
- 2. 1/4" BALL VALVE
- 3. 4" CHECK VALVE
- 4. 2" PRESSURE SUSTAINING VALVE
- 5. 4" GEAR OPERATED BFV
- 7. PRESSURE GAUGE
- 8. LOW PRESSURE GAUGE
- 10. 4" GEAR OPERATED BFV
- CONTROLLER
- 12. ORIVAL ORG SERIES INLINE SCREEN
- 14. SYSTEM BYPASS VALVE
- 15. 1-1/4" BALL VALVE
- 16. PRESSURE REDUCING VALVE
- 18. SOLENOID VALVE
- 20. "WEL FLOW" PRESSURE TANK
- 21. 4" DISCHARGE PIPE 22. FRANKLIN PUMP MODEL 105675-10
- 23. PRESSURE RELIEF DISCHARGE PIPE
- 24. ABB CONTROL PANEL 25. SYSTEM CONTROL PANEL

Bailey Engineering, Inc. REVISED NO. DATE DESCRIPTION CIVIL ENGINEERING | PLANNING | CADD 4242 N. BROOKSIDE LANE dbailey@baileyengineers.com BOISE, ID 83714

DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E. PROJECT: C2012-016 DATE: 02-25-2013 PRESSURE IRRIGATION PUMP STATION ASHEVILLE SUBDIVISION SHEET IRON MOUNTAIN REAL ESTATE LLC

ADA COUNTY HIGHWAY DISTRICT

Registered Engineer of these responsibilities.